RETROSPECTIVE AND PROSPECTIVE STUDY OF FUNCTIONAL AND RADIOLOGICAL OUTCOMES IN COMMINUTED PROXIMAL HUMERUS FRACTURES TREATED BY LOCKING PLATE

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ABSTRACT:

Backgrownd: The incidence of skeletal injuries among trauma victims has increased in the recent years, of which proximal humerus fractures accounts to approximately 4 – 5% of all the bony injuries.[1] It is the third most common fracture type among the elderly population with osteoporotic bone. The treatment of proximal humerus fractures is very challenging due to the wide variety of fracture patterns seen in these injuries.

Methods: All the patients with two part, three part and four part proximal humerus fractures under the inclusion criteria are operated by open reduction and internal fixation using proximal humerus locking plate. They are followed by on periodic intervals. Functional outcome is assessed by Constant-Murley score. Radiological union is assessed by standard AP view for bridging trabeculi.

Results: 21 cases(13 males and 8 females) were studied. The follow up period ranges from from 3 months to 36 months. Most of them were two part fractures

(71%).The average Constant-Murley score achieved was 72.08 with three cases had moderate(28.57%), 13 cases had good(61.90%), and 2 cases had excellent outcome(9.5%). The average duration of radiological union ranges from 12-14 weeks.

Conclusion: In our study , the proximal humerus locking plate fixation was observed to show good functional outcomes in majority of patients. The main advantage is to provide a good fracture stability which allows early mobilisation and it indirectly aids in achieving better functional outcomes. Hence it can be concluded that the proximal humerus locking plate is an effective surgical technique in fixing these displaced fractures in association with scheduled rehabilitation programme to achieve best outcome possible.

Keywords: Osteoporotic, Constant-Murley score, Locking proximal humerus plate, Bridging trabeculi.